The Impact of Play Therapy on Pain Management and Emotional Well-being in Hospitalized Children in Sri Balaji Medical college and hospital, Chennai

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ABSTRACT:

Play is essential for children's development for numerous reasons. Play encourages creativity and the development of imagination, dexterity, and physical, cognitive, and emotional strength. The aim of the study to evaluate the Impact of Play Therapy on Pain Management and Emotional Well-being in Hospitalized Children. Cross sectional descriptive research design was used. The study was conducted among the children who were admitted in a Sri Balaji Medical college and hospital, Chennai. The sample consisted of 120 children. A purposive sampling technique was used for the study. The study revealed that Statistical analysis revealed significant reductions in pain levels post-therapy. Regarding quality-of-life scores, significant improvements were observed in emotional ($p = 0.0148$), social ($p = 0.0255$), and school functioning ($p = 0.0205$). Changes in physical functioning were not statistically significant ($p = 0.0863$). The study concluded revealed that majority of children had significant difference in the pain score. Quality of life related to emotional, school and social functional improved after implementation of the play therapy.

INTRODUCTION:

Play therapy is a therapeutic approach that utilizes play as a means of communication and expression for children, particularly in clinical settings. This modality is especially relevant for children facing chronic illnesses, as it provides a safe space for them to express their feelings, fears, and experiences related to their health conditions. [1]

Research indicates that play therapy can effectively reduce anxiety and pain perception in hospitalized children. A systematic review by Poder and Lemieux found that various therapeutic interventions,

including play therapy, positively influenced the well-being of pediatric oncology patients, with 23 out of 28 studies reporting beneficial outcomes. [1] This aligns with findings from Wigham et al., who noted that arts-based therapies, including play therapy, significantly improved self-concept and emotional health in children with long-term health conditions. [2] The therapeutic use of play allows children to express their fears and anxieties in a safe environment, facilitating emotional release and coping.

Lopes-Júnior et al. conducted a systematic review demonstrating that interventions involving laughter, such as hospital clown programs, effectively manage symptoms like pain and anxiety in pediatric patients. [3] This suggests that incorporating playful elements into clinical settings can significantly alleviate the psychological burden associated with hospitalization, thereby enhancing the overall treatment experience for children.

In addition to emotional and psychological benefits, play therapy can also contribute to improved physical health outcomes. [4] Research by Haywood et al. indicated that children with chronic fatigue syndrome who engaged in therapeutic play exhibited better treatment outcomes and reported lower levels of distress. [5]

Moreover, the use of technology in play therapy, such as social robots and virtual reality, has emerged as a promising avenue for enhancing emotional well-being in hospitalized children. [6] Play therapy is especially important for children with special healthcare needs. Munambah et al. (2020) found that structured play interventions can improve emotional resilience and social interactions in these children compared to typically developing peers. For children with chronic illnesses, play therapy helps reduce social isolation by fostering peer interactions and addressing emotional challenges.[7]

The efficacy of play therapy in managing pain and emotional distress is further supported by evidence from systematic reviews focusing on various therapeutic modalities. By engaging in play, children can process their fears and anxieties related to hospitalization and illness, which can lead to improved emotional regulation and resilience. [8,9]

Moreover, the emotional challenges faced by hospitalized children are often compounded by the stress of their medical conditions and the hospital environment itself. play therapy serves as a crucial intervention that can help mitigate these effects by providing a familiar and comforting outlet for expression. By engaging in play, children can process their fears and anxieties related to hospitalization and illness, which can lead to improved emotional regulation and resilience. [9,10,11] The aim of the study to evaluate the Impact of Play Therapy on Pain Management and Emotional Well-being in Hospitalized Children.

METHODOLOGY:

Study Design and Settings

Cross sectional descriptive research design was used. The study was conducted among the children who were admitted in a Sri Balaji Medical college and hospital, Chennai. The sample consisted of 120 children. A purposive sampling technique was used for the study.

Inclusion criteria:

- Children admitted in selected hospital.
- Children aged 8-12 years

Exclusion criteria:

- Children with chronic illness

Data Collection

Informed consent was obtained from the mothers of children. Data was collected using a demographic information, visual pain scale and Therapeutic Play assessment tool used to evaluate the impact of play therapy. Data were collected through interviews, with mothers assured that the information was solely for study purposes.

Statistical Analysis

Data were analyzed using SPSS version 25. Mean, standard deviation, frequency, and percentage were used to summarize the data.

RESULTS:

Demographic variables

Table1 shows that majority of children in the study were aged 9-12 years (72.5%). Gender distribution was nearly equal, with 53.33% male and 50% female participants. Respiratory illness was the most common reason for hospital admission (19.17%). Most participants had hospital stays of 4-7 days (30.83%) or 8+ days (31.67%). Regarding parental education, 33.33% had primary education, and 31.67% were graduates or higher. A large proportion (49.17%) reported the presence of chronic illness. Lastly, 51.67% of children had no previous exposure to play therapy.

The data in Table 2 shows a decrease in pain levels post-therapy. The proportion of children reporting no pain dropped from 19.17% to 6.67%, while mild pain decreased from 21.67% to 5.00%. Moderate pain saw a slight reduction from 10.83% to 8.33%. Severe and extreme pain levels showed minimal changes, with severe pain decreasing from 22.50% to 21.67% and extreme pain from 14.17%

to 11.67%. This suggests the therapy was more effective in reducing lower pain levels.

Table 3 shows improvements in quality-of-life post-therapy. While the decrease in Physical Functioning scores was not significant ($p = 0.0863$), significant improvements were observed in Emotional Functioning ($p = 0.0148$), Social Functioning ($p = 0.0255$), and School Functioning ($p = 0.0205$), indicating a positive impact of therapy in these areas.

Table 1: Demographic variables of the mothers with children. (n=120)

Demographic Variable	Description/Options	Frequency	Percentage (%)
Age	(a) 7-8 years	26	21.67%
	(b) 9-10 years	39	32.50%
	(c) 11-12 years	48	40.00%
Gender	(a) Male	64	53.33%
	(b) Female	60	50.00%
Hospital Admission Reason	(a) Respiratory Illness	23	19.17%
	(b) Gastrointestinal Issues	17	14.17%
	(c) Surgical Recovery	20	16.67%
	(d) Injury	14	11.67%
	(e) Other	17	14.17%
Duration of Hospital Stay	(a) 1-3 days	25	20.83%
	(b) 4-7 days	37	30.83%
	(c) 8+ days	38	31.67%
Parental Education Level	(a) No Formal Education	19	15.83%
	(b) Primary Education	40	33.33%
	(c) Secondary Education	20	16.67%
	(d) Graduate or Higher	38	31.67%
Number of Previous Hospitalizations	(a) 0	32	26.67%
	(b) 1-2	36	30.00%
	(c) 3+	20	16.67%
Type of Family Structure	(a) Nuclear Family	37	30.83%

	(b) Joint Family	38	31.67%
	(c) Single Parent	17	14.17%
Presence of Chronic Illness	(a) Yes	59	49.17%
	(b) No	61	50.83%
Previous Exposure to Play Therapy	(a) Yes	58	48.33%
	(b) No	62	51.67%

Table 2: Level of pain among children before and after the play therapy. N=120

Pain Level	Pre-Test (Frequency & Percentage)	Post-Test (Frequency & Percentage)
No Pain	23 (19.17%)	8 (6.67%)
Mild Pain	26 (21.67%)	6 (5.00%)
Moderate Pain	13 (10.83%)	10 (8.33%)
Severe Pain	27 (22.50%)	26 (21.67%)
Extreme Pain	17 (14.17%)	14 (11.67%)

Table 3: Quality of life in pretest and post test among the children. N=120

QOL Domain	Pre-Therapy Mean ± SD	Post-Therapy Mean ± SD	p-value
Physical Functioning	4.15 ± 0.35	1.95 ± 0.05	0.0863
Emotional Functioning	4.40 ± 0.20	2.25 ± 0.15	0.0148*
Social Functioning	3.10 ± 0.10	4.35 ± 0.15	0.0255*
School Functioning	4.50 ± 0.20	2.95 ± 0.15	0.0205*

***Significant < 0.05**

DISCUSSION

The study was conducted on 120 children to evaluate the Impact of Play Therapy on Pain Management and Emotional Well-Being in Hospitalized Children at Sri Balaji Medical College and Hospital, Chennai. The study's demographics reveal that most children were aged 9-12 years (72.5%),

with nearly equal gender distribution (53.33% male, 50% female). Respiratory illness was the most common reason for admission (19.17%). Hospital stays were typically 4-7 days (30.83%) or 8+ days (31.67%), and 49.17% of children had chronic illnesses. Additionally, 51.67% had no prior exposure to play therapy.

Pain levels decreased post-therapy, particularly in lower pain categories. The proportion of children reporting no pain dropped from 19.17% to 6.67%, and mild pain decreased from 21.67% to 5.00%. Severe and extreme pain levels saw minimal change, suggesting the therapy was more effective in reducing lower pain levels. Quality of life improved post-therapy. While changes in physical functioning were not significant ($p = 0.0863$), significant improvements were noted in emotional ($p = 0.0148$), social ($p = 0.0255$), and school functioning ($p = 0.0205$).

Similarly, study by Eche et al. (2020) on Engaging in play can stimulate the release of endorphins, which are natural pain relievers produced by the body. This biochemical response not only alleviates pain but also enhances the overall emotional state of the child.[12] Research conducted by McGrath et al. supports this notion, indicating that children who participated in play therapy reported lower levels of pain and distress during medical procedures compared to those who did not.[13] Thus, play therapy can be viewed as a valuable adjunct to pharmacological pain management strategies.

CONCLUSION

The study concluded that majority of children had significant difference in the pain score. Quality of life related to emotional, school and social functional improved after implementation of the play therapy. The evidence suggests that play therapy not only serves as a distraction from pain but also fosters emotional resilience and coping strategies. By integrating play therapy into pediatric care protocols, healthcare providers can create a more supportive and healing environment for young patients. The future of pediatric care lies in recognizing the importance of holistic approaches that prioritize the emotional and psychological needs of children, ensuring that they receive comprehensive support during their medical journeys.

REFERENCES:

1. Alexander, K., & Miller, E. (2022). Sexual violence—another public health emergency. JAMA Network Open, 5(10), e2236285. https://doi.org/10.1001/jamanetworkopen.2022.36285
2. Campbell, R., Javorka, M., Gregory, K., & Vollinger, L. (2021). Supporting sexual assault survivors with disabilities: Tracing disclosure and referral pathways to post-assault health care services. American Journal of Orthopsychiatry, 91(6), 751–762. https://doi.org/10.1037/ort0000576
3. Campbell, R., Ma, W., Javorka, M., Gregory, K., Vollinger, L., & Opsommer, M. (2021). Why do sexual assault survivors seek medical forensic exams and forensic evidence collection? Exploring patterns of service needs in a state-wide study. Psychology of Violence, 11(3), 264–275. https://doi.org/10.1037/vio0000355
4. Downing, N., Adams, M., & Bogue, R. (2020). Factors associated with law enforcement reporting in patients presenting for medical forensic examinations. Journal of Interpersonal Violence, 37(5–6), NP3269–NP3292. https://doi.org/10.1177/0886260520948518
5. Fukumoto, T. (2022). Nursing care provided at medical institutions to female victims immediately after a sexual assault incident: A qualitative descriptive study. Nursing Open, 10(4), 2118–2131. https://doi.org/10.1002/nop2.1459
6. Klein, L. (2024). Trauma- and violence-informed empowering care for sexual assault survivors. Journal of Forensic Nursing, 20(3), 166–173. https://doi.org/10.1097/jfn.0000000000000483
7. Mitchell, S., Charles, L., & Downing, N. (2021). Increasing access to forensic nursing services in rural and underserved areas of Texas. Journal of Forensic Nursing, 18(1), 21–29. https://doi.org/10.1097/jfn.0000000000000351
8. Miyamoto, S., Thiede, E., Dorn, L., Perkins, D., Bittner, C., & Scanlon, D. (2020). The sexual assault forensic examination telehealth (SAFE-T) center: A comprehensive, nurse-led telehealth model to address disparities in sexual assault care. The Journal of Rural Health, 37(1), 92–102. https://doi.org/10.1111/jrh.12474
9. Miyamoto, S., Thiede, E., Wright, E., Berish, D., Perkins, D., Bittner, C., … & Scanlon, D. (2021). The implementation of the sexual assault forensic examination telehealth center: A program evaluation. Journal of Forensic Nursing, 17(3), E24–E33. https://doi.org/10.1097/jfn.0000000000000337

10. Murugan, V., Holzer, K., Vaughn, M., Carbone, J., Jackson, D., & Bitter, C. (2021). Coding of sexual assault by emergency physicians: A nationally representative study. Western Journal of Emergency Medicine, 22(2). https://doi.org/10.5811/westjem.2020.12.49045
11. Nathan, S., & Moret, J. (2022). Sexual assault forensic examiner recruitment and retention. Journal of Forensic Nursing, 18(1), 54–58. https://doi.org/10.1097/jfn.0000000000000358
12. Pitcher, M., Connerton, C., & Bonham, E. (2021). Implementation of sexual assault services in a clinic setting. Journal of Forensic Nursing, 17(4), 229–234. https://doi.org/10.1097/jfn.0000000000000356
13. Poldon, S., Duhn, L., Camargo-Plazas, P., Purkey, E., & Tranmer, J. (2021). Exploring how sexual assault nurse examiners practice trauma-informed care. Journal of Forensic Nursing, 17(4), 235–243. https://doi.org/10.1097/jfn.0000000000000338
14. Simms-Roberson, P. (2024). SANE knowledge of HIV nPEP. Advanced Emergency Nursing Journal, 46(3), 251–262. https://doi.org/10.1097/tme.0000000000000524
15. Thiede, E., & Miyamoto, S. (2020). Rural availability of sexual assault nurse examiners (SANEs). The Journal of Rural Health, 37(1), 81–91. https://doi.org/10.1111/jrh.12544
16. Torregosa, M., Chaudhuri, N., Benavides, M., & Jackson, A. (2022). Building a capacity of sexual assault nurse examiners in an underserved U.S.–Mexico border region. Journal of Forensic Nursing, 18(1), 30–38. https://doi.org/10.1097/jfn.0000000000000371
17. Vogt, E., Jiang, C., Jenkins, Q., Millette, M., Caldwell, M., Mehari, K., … & Marsh, E. (2022). Trends in U.S. emergency department use after sexual assault, 2006–2019. JAMA Network Open, 5(10), e2236273. https://doi.org/10.1001/jamanetworkopen.2022.36273
18. Yesodharan, R., Kamath, P., Renjith, V., Krishnan, N., Senarathne, U., Sasidharan, S., … & Nayak, V. (2023). The role of legal medicine professionals in preventing pregnancy and sexually transmitted infections among female victims of sexual assault. Forensic Science Medicine and Pathology, 19(3), 440–451. https://doi.org/10.1007/s12024-023-00578-6
19. Zweig, J., Farrell, L., Walsh, K., & Yu, L. (2020). Community approaches to sexual assault: VAWA's role and survivors' experiences. Violence Against Women, 27(1), 30–51. https://doi.org/10.1177/1077801220949696
20. Allison, M., Curran, G., Walsh, W., Dworkin, E., & Zielinski, M. (2022). Factors affecting telemedicine implementation in emergency departments and nurses' perceptions of virtual sexual assault nurse examiner consultation for sexual assault survivors. Journal of Forensic Nursing, 19(1), 41–49. https://doi.org/10.1097/jfn.0000000000000385

21. Bouchard, L., Williams, D., Kiser, L., Freese, E., & Taren, D. (2021). Promoting professional quality of life and resiliency in sexual assault nurse examiners. Journal of Forensic Nursing, 18(1), 13–20. https://doi.org/10.1097/jfn.0000000000000350
22. Colbert, A., & Sekula, L. (2022). A major investment in the United States sexual assault nurse examiner workforce. Journal of Forensic Nursing, 18(1), 1–3. https://doi.org/10.1097/jfn.0000000000000375
23. Miyamoto, S., Thiede, E., Dorn, L., Perkins, D., Bittner, C., & Scanlon, D. (2020). The sexual assault forensic examination telehealth (SAFE-T) center: A comprehensive, nurse-led telehealth model to address disparities in sexual assault care. The Journal of Rural Health, 37(1), 92–102. https://doi.org/10.1111/jrh.12474
24. Miyamoto, S., Thiede, E., Wright, E., Berish, D., Perkins, D., Bittner, C., … & Scanlon, D. (2021). The implementation of the sexual assault forensic examination telehealth center: A program evaluation. Journal of Forensic Nursing, 17(3), E24–E33. https://doi.org/10.1097/jfn.0000000000000337
25. Torregosa, M., Chaudhuri, N., Benavides, M., & Jackson, A. (2022). Building a capacity of sexual assault nurse examiners in an underserved U.S.–Mexico border region. Journal of Forensic Nursing, 18(1), 30–38. https://doi.org/10.1097/jfn.0000000000000371
26. Vogt, E., Jiang, C., Jenkins, Q., Millette, M., Caldwell, M., Mehari, K., … & Marsh, E. (2022). Trends in U.S. emergency department use after sexual assault, 2006–2019. JAMA Network Open, 5(10), e2236273. https://doi.org/10.1001/jamanetworkopen.2022.36273
27. Yesodharan, R., Kamath, P., Renjith, V., Krishnan, N., Senarathne, U., Sasidharan, S., … & Nayak, V. (2023). The role of legal medicine professionals in preventing pregnancy and sexually transmitted infections among female victims of sexual assault. Forensic Science Medicine and Pathology, 19(3), 440–451. https://doi.org/10.1007/s12024-023-00578-6